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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/561,386

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Junji Morita

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EXAMINER

MARTIN, ANGELA J

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

08/31/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/561,386	<b>Applicant(s)</b> MORITA ET AL.	
	<b>Examiner</b> ANGELA J. MARTIN	<b>Art Unit</b> 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This Office Action is responsive to the Amendment filed on June 15, 2010. The Applicant has amended claims 1-5 and 7-10; and added new claim 11. However, Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, this action is made final.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (Akira et al), JP 62-190660 (STIC translation), in view of Jia et al., US 2003/0224226.

Regarding claim 1, Matsumoto et al. teaches a fuel cell system composed of a fuel cell, a fuel supply system, an oxidant supply system, and a controller (p. 8, para. 2). The fuel supply system includes fuel valving for controlling the flow of fuel to an anode and a cathode (p. 8, para. 2-3). The oxidant supply system includes oxidant valving for controlling the flow of oxidant to the cathode (p. 8, para. 2). The controller is used to control the fuel and oxidant valving such that, during normal operation, fuel is supplied to the anode and that oxidant is supplied to the cathode (p. 10, para. 1). Matsumoto et al. also teaches that one may also consider running cycles partway through a storage

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period or even at shutdown (p. 8, para. 3-4). Matsumoto et al. teaches that a controller can facilitate the start-up of a system after storage, control activities during normal system operations, and direct system activity during shutdown (p. 8, para. 3-4).

Regarding claim 2, Matsumoto et al. teaches raw material gas supplying means purges anode side inside fuel cell after purging cathode side (p. 8, last para.).

Regarding claim 3, Matsumoto et al. teaches a valving system, including a fuel gas on-off valve and a oxidizing agent gas on-off valve, and a raw (natural) material gas on-off valve (p. 7, last para.).

Regarding claim 4, Matsumoto et al. teaches cathode exhaust pipe, cathode off-gas valve, purge via raw (natural) material gas valve (p. 8, first para.).

Regarding claim 5, Matsumoto et al. teaches an additional shutoff valve in gas line (p. 8, first para.).

Regarding claim 6, Matsumoto et al. teaches oxidizing agent supplied to fuel gas and oxidizing agent gas to fuel cell by opening anode valve, opening fuel valve, opening cathode valve and opening oxidizing agent valve (p. 8, para. 2-3).

Regarding claim 7, Matsumoto et al. teaches method of starting fuel cell system including purging on cathode side with a raw material gas (p. 8, para. 1).

Regarding claim 8, Matsumoto et al. teaches anode is purged after purging cathode (p. 10, para. 1).

Jia et al., teaches a conditioning system for a fuel cell (abstract). Jia et al., teach a program which can be processed by a computer (0021-0023).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to insert the teachings of Jia et al., into the teachings of Matsumoto et al., because Jia et al., specifically recite “conditioning” of the fuel cell system and teach a programmed system which may be repeatable.

### ***Response to Arguments***

3. Applicant's arguments with respect to above claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANGELA J. MARTIN whose telephone number is (571)272-1288. The examiner can normally be reached on Monday-Friday from 10:00 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on 571-272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJM

Examiner, Art Unit 1795

/Dah-Wei D. Yuan/

Supervisory Patent Examiner, Art Unit 1795